

FINAL DECISION DOCUMENTATION and DECISION RATIONALE

MAINLINE THINNING AND RESTORATION PROJECT

Environmental Assessment Number OR080-02-03

USDI - Bureau of Land Management
Salem District, Marys Peak RA Resource Area

Sections 17 and 19, Township 14 South, Range 6 West, Willamette Meridian

Benton County, Oregon

I. BACKGROUND

An interdisciplinary team (IDT) has analyzed approximately 560 acres managed by the Marys Peak Resource Area, Salem District, BLM (Bureau of Land Management) for a commercial thinning proposal. The stands analyzed are located within the Marys River watershed. An environmental analysis was conducted and documented in the Mainline Thinning and Restoration Environmental Assessment (EA) Number OR080-02-20. Approximately 350 acres were dropped from further analysis as described under Alternatives Considered but Eliminated on page 16 of the EA. The EA documented a proposal to do commercial thinning and density management (Project 1) on approximately 212 acres, including: 90 acres within the GFMA (Matrix) Land Use Allocation (LUA) and approximately 122 acres in Riparian Reserves. The proposed action also included Bedload trapping and stream gradient reduction (Project 2), Releasing wolf trees (Project 3), Fish habitat enhancement (Project 4), Site preparation and conifer planting (Project 5). Road construction and road renovation were also part of the proposal. A Finding of No Significant Impact was signed on March 14, 2003 and the EA and FONSI were made available for public review from March 15, 2003 to April 15, 2003.

Further IDT field reconnaissance since the release of the EA has resulted in the need to update some information in the document. Additional changes to the proposed action are described in the following section, which also describes any changes to the analysis and determination of effects as presented in the March 14, 2003 EA.

II. MODIFICATIONS TO THE PROPOSED ACTION / CHANGES TO AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

1. Changes to the Proposed Action

- a. *Treatment Prescription acreage changes* - Acreages have been finalized based on unit traverse, sale layout and the decision to drop the tractor swing yarding area.

Treatment Prescription

	<u>Contract</u>	<u>EA</u>	<u>Change</u>
Density Management (Riparian Reserve)	66	117	(51)
Commercial Thinning (Matrix)	108	95	13
Total	174	212	(36)

- b. *Thinning volume* - Final volume estimates for the sale was determined through a field timber cruise. The cruised volume is approximately 2,672 thousand board feet (MBF), an increase of 1,072 MBF over estimates made for the EA.
- c. *Logging Systems* - Ground based logging decreased from 90 acres estimated in the EA to 83 acres in the contract. Cable yarding decreased from 119 acres estimated in the EA to 92 acres in the contract. Tractor swing yarding decreased from 3 acres in the EA to 0 acres in the contract.
- d. *Road Work* - The EA made estimates as to the amount of road construction, renovation and blocking that would be done. The actual amounts vary from those amounts identified in the EA. The estimated and actual figures are listed and compared in the table below.

Description	Actual	EA	Change	% Change
Road Construction	3360	3200	160	5
Renovation	14566	6400	8166	128
Blocking New Road Construction	3360	3200	160	5

- e. *Bark Slippage Restriction* - There is a discrepancy in the EA for bark slippage seasonal restriction. The last paragraph on page 10 of the EA lists a bark slippage seasonal restriction on yarding only. The seasonal summary table on the top of page 14 in the EA inadvertently lists the bark slippage seasonal restriction as being for both falling and yarding. Any reference for bark slippage seasonal as including falling is hereby deleted.

2. Changes to the Environmental Consequences

a. Soils and Water

- i) Cable Yarding: Reducing the number of cable yarded acres from 119 in the EA to 92 in the timber sale contract would reduce non-mitigated compaction and loss of productivity on the proposed sale area proportionally.
- ii) Ground Based Yarding: Reducing the number of ground based yarded acres from 119 in the EA to 92 in the timber sale contract would reduce non-mitigated compaction and loss of productivity on the proposed sale area proportionally.
- iii) Tractor Swing Yarding: Reducing the number of tractor swing yarded acres from 3 to 0 will eliminate all impacts as a result of this tractor swing yarding.
- iv) Road Renovation: The timber sale contract contains more road renovation than originally estimated in the EA. The significant increase in amount of road renovation is due increased spot rocking along the haul route. The additional spot rocking will mitigate impacts due to all season haul.
- v) Road Construction: The timber sale contract contains more road construction and more road blocking than originally estimated in the EA. Impacts due to road construction will be similar to those identified in the EA.

III. DECISION

Based on site-specific analysis in the Environmental Assessment, the supporting project record, management recommendations contained in the Watershed Analysis (South Fork Alsea) dated November, 1995 as well as the management direction contained in the RMP (*Salem District Resource Management Plan*), dated May, 1995, I have decided to implement Alternative 3 (Tractor yarding seasonal restriction change) and Alternative 4 (Deletion of tractor swing yarding area) described in the Mainline Thinning and Restoration Project Environmental Assessment (EA # OR080-02-03) (EA pp. 6-17) This decision will be referred to from this point as the “selected action”.

The following is a summary of this decision.

Project 1

1. Thin approximately 174 acres from GFMA (Matrix) and Riparian Reserve Land Use Allocations with an expected yield of 4,488 hundred cubic feet (CCF) (2,672 MBF). The following is a description of thinning acres and timber volumes by treatment method.
 - a. *Commercial thinning* (Partial Cut) of approximately 108 acres of Matrix lands.
 - b. *Density Management - Riparian Reserve*: Individual tree selection thinning of approximately 66 acres within Riparian Reserve.
2. Thinning and density management would occur through two timber sales (Dawson Creek and Mainline thinning) which would be offered in FY 2003. Trees 50 to 60 years old would be skyline yarded on approximately 91 acres, ground-based yarded on approximately 83 acres. Approximately 3,360 feet of new road construction and 14,566 feet of road renovation would occur to access the harvest area. The new road construction would be blocked and winterized following completion of harvest.
3. The season for allowing ground-based yarding would be changed from between August 1 and October 15 to between July 15 and October 15.
4. The tractor swing yarding area in Unit 19C (Appendix A-2, EA Map) has been dropped. The remainder of unit 19C will be skyline cable yarded.

5. Road Renovation: Road Renovation (brushing, blading, minimal excavation, upgrading drainage structures and tree removal or applying rock surfacing) would occur on approximately 2 miles of existing road. These activities would take place within the current road prism.
6. Road Winterizing and Blocking: The new construction roads would be blocked and winterized(approximately 3360 feet).
7. Compliance with Direction

The selected action is consistent with applicable land use plans, policies, and programs

c. Programmatic documents covering this proposal are the:

- *Record of Decision for Amendments to the Survey and Manage, Protection Buffer, and Other Mitigation Measures Standards and Guidelines (ROD, January, 2001).*
- *Salem District Resource Management Plan (May 1995)*
- *Record of Decision (ROD) for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (April 1994)*
- *Western Oregon Program-Management of Competing Vegetation Record of Decision (August 1992).*

All of these documents may be reviewed at the Marys Peak Resource Area office. Monitoring activities related to this sale will be done as described in Appendix J of the RMP (May, 1995).

The following table describes unit numbering between the EA and Exhibit A s which are enclosed in Appendix A:

EA Unit No.	Contract Exhibit A Unit No.	Comment
17A	1 - Dawson Thinning	Shown as partial cut ground based yarding area
17B	4 – Mainline Thinning	
19A	2 – Mainline Thinning	
19B	3 – Mainline Thinning	
19C	1 – Mainline Thinning	

Other projects analyzed in the EA

A decision on Projects 2-5 will be deferred to a later date and are not part of this decision.

Mainline Thinning Restoration Final Decision Documentation and Rationale EA No.OR-080-02-03

IV. DECISION RATIONALE

Considering public comment, the content of the EA and supporting project record, the management recommendations contained in the South Fork Alsea Watershed Analysis, and the management direction contained in the RMP, I have decided to implement the selected action as described above. My rationale for this decision follows:

The selected action addresses the identified purpose and need for action in that it will:

- a. Contribute to meeting the need for a sustainable supply of timber by immediately making approximately 2,672 MBF (4,488 CCF) of Matrix timber available and managing these forest stands to provide a long term sustainable supply of timber.
- b. Contribute to meeting the need for a healthy forest ecosystem by speeding the development of desirable ecosystem components that are currently lacking due to past management practices.
- c. Adequately protect the watershed while meeting other objectives.
- d. Not preclude the recovery of any listed species nor contribute to the need to list a species.

The “No Action” alternative, Alternative 2 and alternatives, which were dropped from further consideration during the development of the proposed action, would not satisfactorily fulfill the Purpose and Need for action, EA p. 1-3.

Alternative 3 was selected over Alternative 1(Proposed Action) for the following reasons:

- a. The August 1 starting date for ground based yarding under Alternative 1 was proposed as a design feature to reduce the potential risk of increasing the aerial extent of deeper compaction in the tractor yarding areas that may take place earlier in the year due to the probability of wetter soil conditions. Soil impacts under Alternative 3 still would be within RMP guidelines which provide for 10 percent as the maximum acceptable level of aerial extent for soil disturbance/compaction
- b. Approximately 47 percent (83 acres) of the proposed action was proposed for ground based yarding. The addition of the time period in this alternative would coincide with the end of the yarding restriction for low sap flow (July 15) and could positively increase the marketability of the sale.

Alternative 4 was selected over Alternative 1 (Proposed Action) for the following reason:

- a. Under Alternative 1 tractor swing yarding would occur in conjunction with cable yarding in unit 19C. This tractor use would be inconsistent with all season cable yarding proposed for the sale.

V. PUBLIC INVOLVEMENT/ CONSULTATION/COORDINATION

1. Scoping

A description of the proposal was included in the Salem Bureau of Land Management *Project Update* issues mailed in July 2002 and March 2003 to more than 1200 individuals and organizations on the mailing list. A letter asking for scoping input on the proposal was mailed on March 21, 2002, requesting identification of issues to be addressed in this EA.

2. Comment Period and Comments

The EA was mailed to approximately 41 agencies, individuals and organizations. A legal notice was placed in local newspapers soliciting public input on the action from March 24, 2003 to April 15, 2003. One comment letter was received.

Responses to these comments can be found in the *Response to Public Comments Received on the Mainline Thinning and Restoration Project* in the Mainline Thinning project file and are also attached as an appendix to this Decision Rationale.

3. Consultation/Coordination

The Mainline Thinning and Restoration Project was submitted for Informal Consultation with U.S. Department of Commerce, National Marine Fisheries Service (NOAA Fish), as provided in Section 7(a)(2) of the Endangered Species Act of 1973 and the Magnuson-Stevens Act section 305 (b)(2). NOAA Fish concurred on February 19, 2003 with BLM's determination that the Mainline Thinning and Restoration Project is a "Not likely to adversely affect" Oregon coast coho salmon.

The timber sale was submitted for Formal Consultation with U.S. Fish and Wildlife Service as provided in Section 7 of the Endangered Species Act of 1973 (16U.S.C. 1536 (a)(2) and (a)(4) as amended). This consultation was part of the *Programmatic Biological Assessment in the North Coast Province for Fiscal Year 2003-2004 Projects Which Would Modify the Habitats of Bald Eagles, Northern Spotted Owls, and Marbled Murrelets*. Consultation was completed on July 24, 2002 (Reference number 1-7-02-F-956). As a result of consultation, the U.S. Fish and Wildlife Service found that the sale would not likely jeopardize the continued existence of the bald eagle, northern spotted owl or marbled murrelet.

VI. CONCLUSION

I have determined that change to the Finding of No Significant Impact (FONSI – March 14, 2003) for the Mainline Thinning and Restoration Project is not necessary for these reasons:

The existing EA for the Mainline Thinning and Restoration Project, along with additional information contained in this document, fully covers the project. There are no significant new circumstances or facts relevant to environmental concerns and bearing on the modification to the proposed action or its impacts, which were not addressed in the EA. The action is within the scope of the alternatives identified in the original EA, and the environmental impacts are within those described in the original EA and are less than or the same as those anticipated for the proposed action in that assessment.

Protests

In accordance with Forest Management Regulations at 43 CFR 5003.2, the decision for this timber sale will not become effective or be open to formal protest until the Notice of Sale is published “in a newspaper of general circulation in the area where the lands affected by the decision are located”. Protests of this sale must be filed within 15 days of the first publication of the notice. For this project, the Notice of Sale will be published in the *Corvallis Gazette Times* on or before July 4, 2003. The planned sale date is July 30, 2003.

Contact Person

For additional information concerning this decision or the BLM protest process, contact Phil Sjoding (503) 315-5980, Randy Gould (503) 375-5682 or Cindy Enstrom (503) 315-5969, Marys Peak Resource Area, Salem BLM, 1717 Fabry SE, Salem, Oregon 97306.

Approved by: Cindy Enstrom
Cindy Enstrom
Marys Peak Resource Area Field Manager

6/13/03
Date

Appendix A

Maps

Project 1 is displayed on Maps 1-3

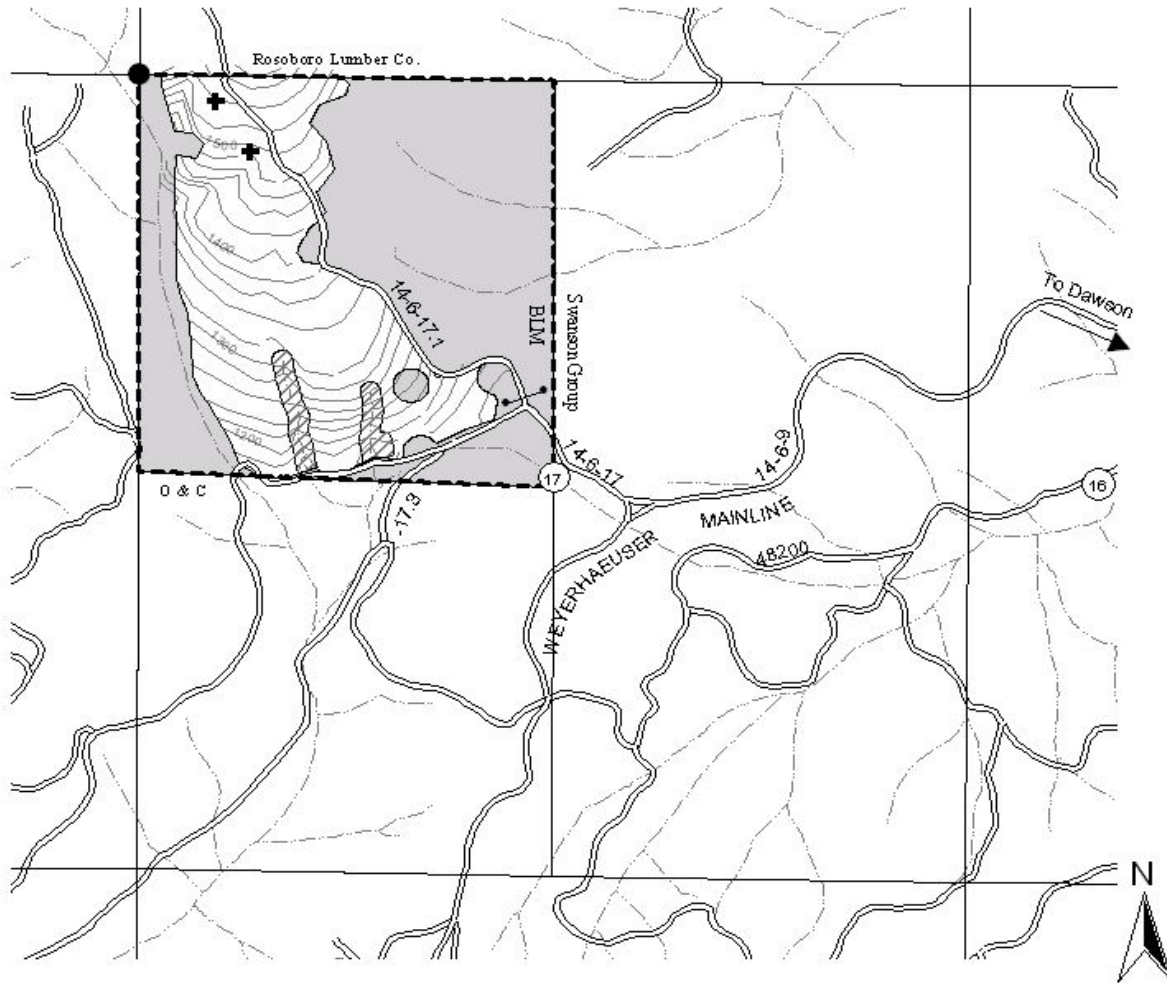
Decision Record Map 1

May 6, 2003

United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Dawson Thinning
Tract 03-307
EXHIBIT A

TIMBER SALE CONTRACT MAP CONTRACT NO. OR080-TS03-307
T. 14 S., R. 6 W., Section 17, WILL. MER. — SALEM DISTRICT, OREGON



NOTE: Boundary of cutting area is posted and painted orange. Boundaries of stream protection zones are flagged in fluorescent pink flagging and posted green.

LEGEND

- Existing Road
- Stream
- Approximate location of seed tree
- Corner found
- Gate

Partial Cut Area	70 acres
Reserve Area	90 acres
Total Contract Area	160 acres

- Partial Cut Ground Based Yarding Area
- Reserve Area
- Stream Protection Zone
- Boundary - Contract area
- Boundary - Cutting area

Scale: 1" = 1,000'
Contour interval: 20 ft.

Decision Record Map 2

May 14, 2003

United States Department of the Interior
BUREAU OF LAND MANAGEMENT

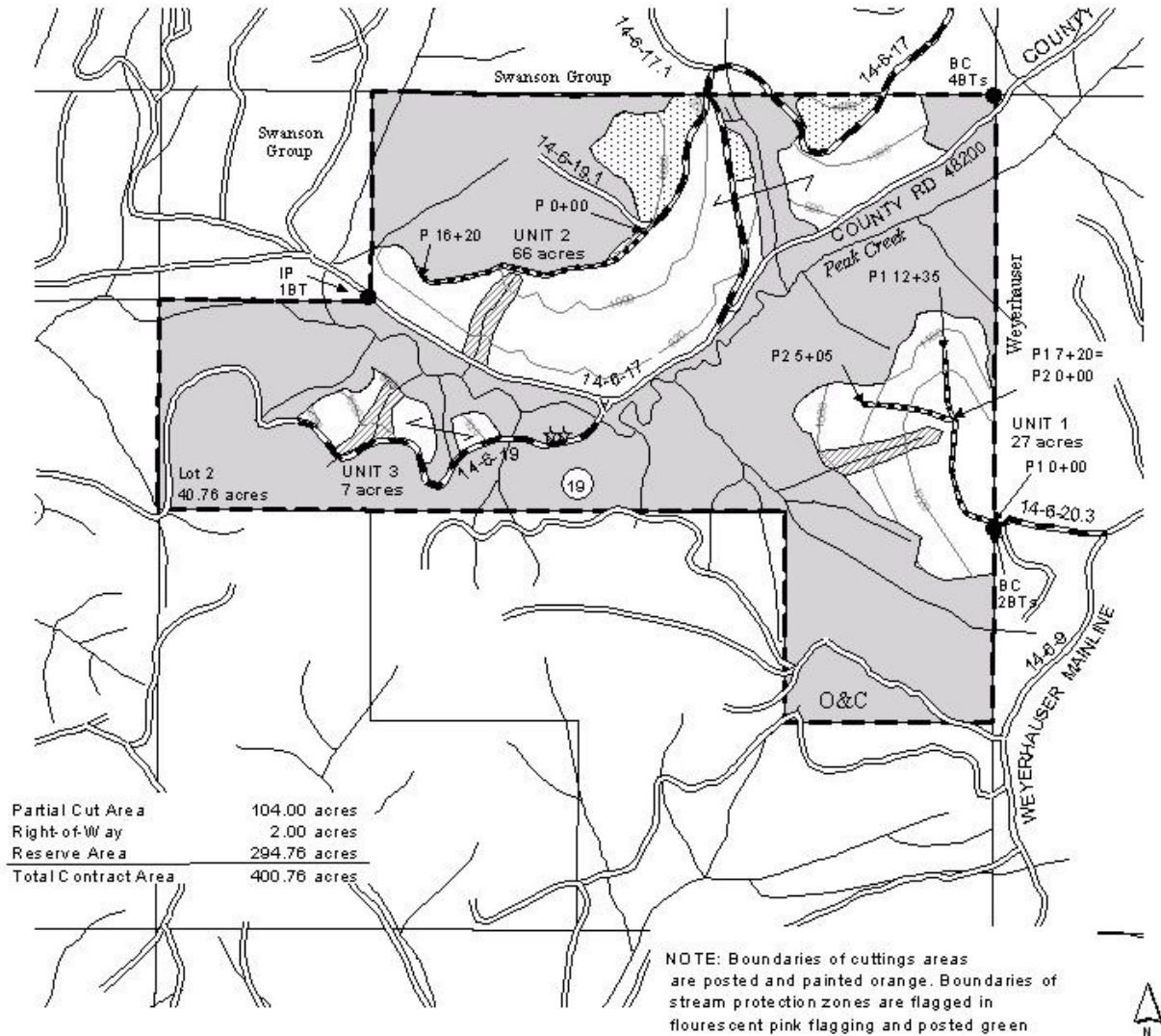
Mainline Thinning

EXHIBIT A

Page 1 of 2

TIMBER SALE CONTRACT MAP CONTRACT NO. OR080-TS03-304

T.14S.,R.6W., Section 19, W. M. - SALEM DISTRICT - OREGON



Scale 1" = 1000'
Contour interval = 80'

LEGEND

- | | | |
|---|--|---|
| — Existing Road | ★ Approximate location in which trees are marked in the reserve area with red paint (Special mark) | Partial cut - ground based yarding area |
| — Road to be constructed - Right-of-way | — Gate | Partial cut - skyline yarding area |
| — Road to be Renovated | ● Corner found | Reserve Area |
| — Streams | — Boundary - contract area | Stream protection zone |
| | — Boundary - cutting area | |

Decision Record Map 3

May 14, 2003

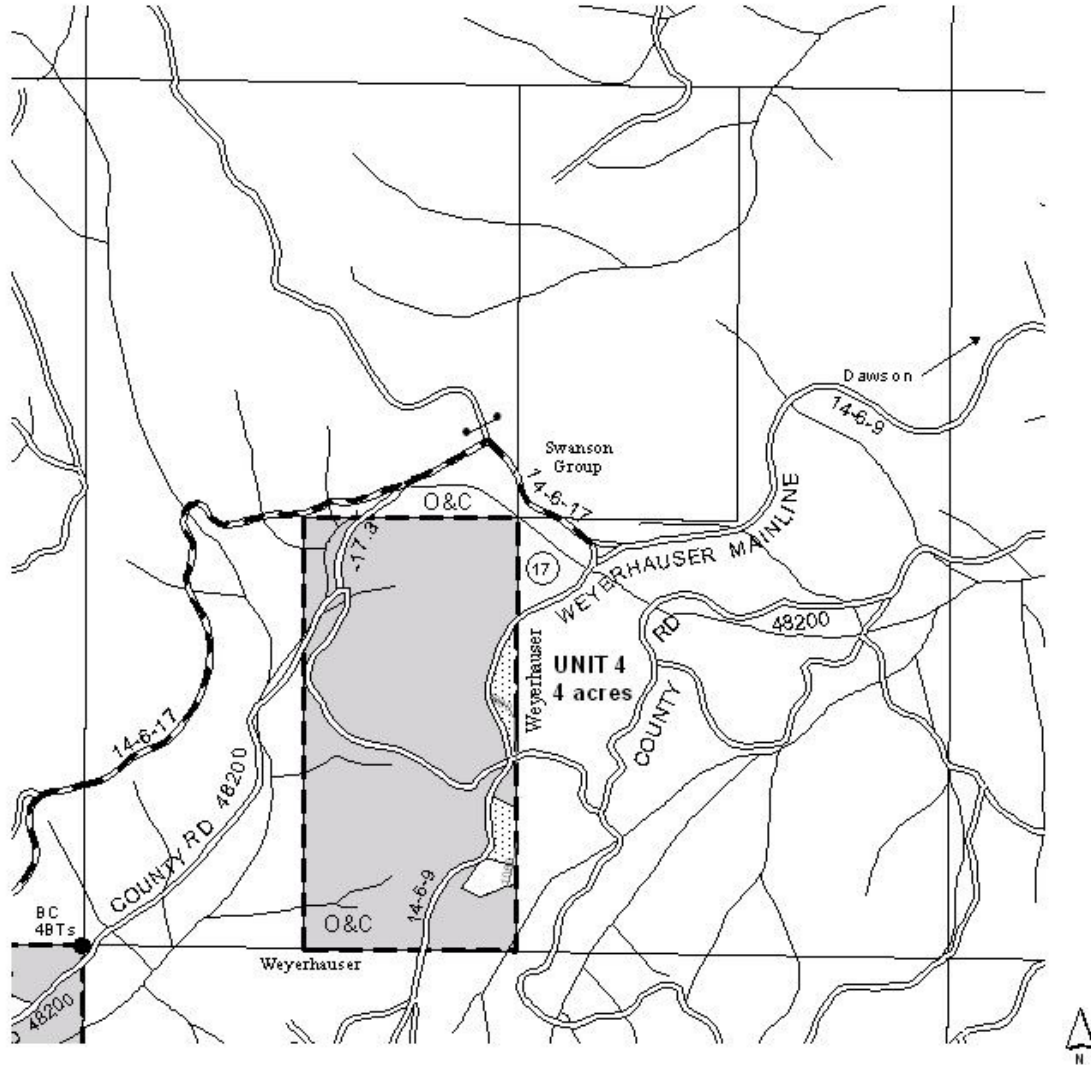
United States Department of the Interior
BUREAU OF LAND MANAGEMENT

TIMBER SALE CONTRACT MAP CONTRACT NO. OR080-TS03-304
T.14S., R.6W., Section 19, W. M. - SALEM DISTRICT - OREGON

Mainline Thinning

EXHIBIT A

Page 2 of 2



Scale 1" = 1000'
Contour interval = 80'

LEGEND

Existing Road	Approximate location in which trees are marked in the reserve area with red paint (Special mark)	Partial cut - ground based yarding area
Road to be constructed - Right-of-way	Gate	Partial cut - skyline yarding area
Road to be Renovated	Corner found	Reserve Area
Streams	Boundary - contract area	Stream protection zone
	Boundary - cutting area	

Appendix B

Response to Public Comments Received on the Mainline Thinning and Restoration Project

The following are comments that the BLM received from the public after public review of the Environmental Analysis (EA). The comments, (in normal type), may have been paraphrased for clarity or conciseness, but the complete text of the comment was available to the IDT making the response. The full text of the comment letters is available in the Mainline Thinning and Restoration Project EA file. The IDT response is in *italics*.

Commenter: Oregon Natural Resource Council

I would prefer to see more variable density thinning on matrix lands.

This comment is out of the scope of this analysis because we are proposing commercial thinning on matrix lands for this project.

I feel that thinning riparian reserves down to 50 tpa, even when the trees are large, is too heavy. More trees should be left, knowing that density dependent mortality may result in higher concentration of snags and CWD in the riparian area in unit 17A.

50 trees per acre is the minimum number that would be left in Unit 17A (Partial Cut Ground Based Yarding Area, Exhibit A, Dawson Thinning) . The marking guide for the riparian reserves (available in the NEPA file) calls for leaving trees on a variable spacing ranging from 50 to 65 trees per acre, (page 8 in the EA).

To replace some mortality lost as a result of thinning, one green tree per acre would be utilized for snag/down log creation in the riparian reserves (EA page 8), and these trees would be stand average or larger (approximately 19" DBH for Unit 17A). Additional CWD and snags would be created when the upland portion of the project is regeneration harvested, most likely in approximately 20 years (EA page 47). Organon (a growth and yield model cited in the EA, page 46) indicates that total mortality larger than 18 inches diameter for the next 15 years if the stand were not thinned, would be approximately 0.6 trees per acre. Mortality for the same size trees from 15 to 30 years in the future would be another 1.4 trees per acre, totaling approximately 2 trees per acre. In our judgment, we are creating an adequate amount of snags/down wood now, while leaving enough trees for future snag/down wood recruitment, and opening up the canopy to promote understory conifer development.

We are somewhat concerned that projects 2-5 described on page 14 may not occur due to funding and workload problems.

We are also concerned that projects 2-5 may not occur due to funding and workload problems. However, we are certain enough of funding for these projects that we included them in this EA so that NEPA requirements are covered should funding become available.

While occasionally we do support temporary, ridgeline road spurs to access thinning units cost effectively, this project calls for permanent road construction and skid trails in riparian reserves.

Regarding permanent road construction in riparian reserves there are several design features (stated in the EA on page 11) which mitigate their impacts including: new roads will be predominantly located on or near ridge top locations, all of these roads would be surfaced and outsloped, new construction would be blocked and winterized, and road construction would be restricted to periods of low precipitation. We recognize that there is one new road along the northern boundary of unit 19A (Unit 2, Exhibit A, Mainline Thinning) which would be constructed within riparian reserves. As stated in the EA on page 38, the road would run approximately 100 feet from and perpendicular to the stream initiation point of a tributary to Peak Creek. This road construction is unlikely to impact the channel morphology and/or water quality of this stream for the following reasons: 1) the road construction would follow a very low gradient (gradient between the road site to the SIP is variable around 12 percent), 2) best management practices would be implemented to minimize impacts to soils, vegetation, and water quality, during and following reconstruction (as described above and below), and 3) adequate forest ground cover exists to dissipate any potential increases in runoff and to trap/filter sediments before they can reach the SIP.

Regarding skid trails in riparian reserves there are several design features (stated in the EA on pages 9,10,11,12) which mitigate their impacts including limiting ground based yarding to periods of low soil moisture, limiting ground based yarding to slopes less than 35 percent, skid trail spacing requirements, use of existing skid trails where possible, waterbarring grass seeding and a prohibition against yarding within stream protection zones.

Also impacts as a result of ground based yarding within riparian reserves will be further limited by the fact that the number of passes over the portions of skid trails located within the riparian reserves would be low because where they are located is usually near the terminal end of skid trails. Also, the requirement that trees will be felled away from stream protection zones limits the need for skid trails to be built close to the streams.

We encourage BLM to drop the western portion of unit 19A and make the remainder of the road construction temporary with full decommissioning following use.

The western portion of unit 19A (Unit 2, Exhibit A, Mainline Thinning) contains both commercial thinning in matrix and density management in riparian reserve. We have identified that unit 19A is overcrowded and in need of thinning (EA page 19). Also, please see our above response regarding permanent road construction in riparian reserves.

We would support dropping the tractor swing yarding as called for in Alternative 4.

We agree and have decided to drop tractor swing yarding as called for under Alternative 4 for Unit 19C (see Decision Record page 4). This tractor use in Unit 19C would be inconsistent with all season cable yarding proposed for the sale.